

Customer Installation Manual

Datascope Panorama®

WEB VIEWER

Panorama® is a U.S. trademark of Mindray DS USA, Inc.

Copyright © Mindray DS USA, Inc. 2008.. All rights reserved. Contents of this publication may not be reproduced in any form without permission of Mindray DS USA, Inc.

Foreword	v
Warnings, Precautions and Notes	v
Warnings	v
Precautions	vi
Notes	vi
Phone Numbers and How To Get Assistance	vii
Overview of the Panorama Web Viewer	viii
Prerequisites	1 - 1
Server-Side Requirements	1 - 1
Minimum Hardware Requirements	1 - 1
Software Requirements	1 - 1
Network Configuration	1 - 2
Server Configuration	1 - 2
Client Side Requirements	1 - 3
Recommended Software	1 - 3
Client Configuration	1 - 3
Installation	2 - 1
Installing the Panorama Web Viewer	2 - 1
Uninstallation	3 - 1
Uninstalling the Panorama Web Viewer	3 - 1
Basic Operation	4 - 1
Administrative Login	4 - 1
User Management	4 - 2
System Configuration	4 - 3
User Login	4 - 4
Display Calibration	4 - 5
Menu Selections	4 - 6
Exiting the Panorama Web Viewer Application	4 - 7
Troubleshooting	5 - 1

Foreword

This installation manual outlines the supported configurations and technical installation instructions for Panorama Web Viewer. It is designed for a technical person that has knowledge about simple networks, a basic knowledge of Microsoft Server, and has basic computer skills.

This publication may have been updated to reflect product design changes and/or manual improvements.

NOTE: **Figures in this manual are provided for reference purposes only.**

Warnings, Precautions and Notes

Please read and adhere to all warnings, precautions and notes listed here and in the appropriate areas throughout this manual.

A **WARNING** is provided to alert the user to potential serious outcomes (death, injury, or serious adverse events) to the patient or the user.

A **CAUTION** is provided to alert the user to use special care necessary for the safe and effective use of the device. They may include actions to be taken to avoid effects on patients or users that may not be potentially life threatening or result in serious injury, but about which the user should be aware. Cautions are also provided to alert the user to adverse effects on this device of use or misuse and the care necessary to avoid such effects.

A **NOTE** is provided when additional general information is applicable.

Warnings

WARNING: **Clinical judgment should be used when the Panorama Web Viewer is utilized for patient care.**

WARNING: **The Panorama Web Viewer should be used only as an alternative means of viewing patient information.**

WARNING: **The Panorama Web Viewer application may lock up or shutdown due to hardware or operating system problems in the computer. Operator action in these cases is to restart the Internet Explorer application.**

WARNING: **There is a potential danger to the patient if an improperly configured Server is connected to the Panorama Network. This may interrupt the normal functions of the Central Stations and Patient Monitoring devices on the Panorama Network.**

Precautions

- CAUTION:** Panorama Web Viewer server software should reside on a separate server so that the integrity of the Panorama real-time network is not compromised.
- CAUTION:** Panorama Central Station Warranties and Service Agreements **DO NOT** cover issues that may arise during the installation of the Panorama Web Viewer.
- CAUTION:** For a proper understanding of the Panorama Web Viewer application, knowledge of the Panorama Central Station is required. For additional information regarding the Panorama Central Station and/or the Panorama Patient Monitoring Network, please refer to the Panorama Central Station Operating Instructions.
- CAUTION:** Display calibration is required for the waveforms to be of diagnostic quality.
- CAUTION:** The waveforms displayed at the Panorama Web Viewer may have less than a five (5) second latency in comparison to the corresponding patient monitor. [MR17965]
- CAUTION:** When using Panorama Web Viewer, the operator should always verify that the correct patient is selected.

Notes

- NOTE:** For Panorama Web Viewer use, Panorama Central Station software must be version 8.4.X or 8.5.X and the E-LAN must be configured to either View Only or Full.
- NOTE:** The switch that connects the E-LAN and C-LAN must be either a level 2 "smart" switch or a level 3 switch. The level 2 switch must support the IGMP feature.
- NOTE:** If the E-LAN and C-LAN are already connected to individual 3com 2250 Plus switches, then a patch cable can be used to connect these two switches.
- NOTE:** Changing the session time while users are logged in, will cause the users to have to login in again.
- NOTE:** Please refer to the Panorama Web Viewer Operations Manual included on the installation CD (P/N 0996-CD-0178-XXX) for more in depth directions in using the Panorama Web Viewer.

Phone Numbers and How To Get Assistance

Prior to requesting service, perform a complete operational check of the instrument to verify proper control settings. If operational problems continue to exist, contact the Service Department at (800) 288-2121 or (201) 995-8116 for assistance in determining the nearest field service location.

Please include the instrument model number, the serial number, and a description of the problem with all requests for service.

Any questions regarding the warranty should be directed to the nearest authorized location. A list of international offices, along with their phone numbers, is provided at the end of this manual.

Overview of the Panorama Web Viewer

The Panorama Web Viewer provides a web-based interface to the Panorama network for remote reviewing of real-time patient data, trending, and event data, on the Panorama Patient Monitoring Network. The Panorama Web Viewer is server-side software that resides on the Panorama network and acts as a gateway to a hospital network. It uses two network interface cards to partition network traffic in order to preserve the integrity of the real-time network.

CAUTION: **Panorama Web Viewer server software should reside on a separate server so that the integrity of the Panorama real-time network is not compromised.**

CAUTION: **Panorama Central Station Warranties and Service Agreements DO NOT cover issues that may arise during the installation of the Panorama Web Viewer.**

1.1 Server-Side Requirements

1.1.1 Minimum Hardware Requirements

- 2.8 GHz Intel Pentium D CPU
- 2 GB of RAM memory
- 1 GB of available hard drive space
- Two 10/100 Mbps Network Interface Cards
- CD ROM drive

1.1.2 Software Requirements

- Microsoft Windows Server 2003 Standard Edition SP2
- Microsoft Internet Information Service (IIS) 6.0
- Microsoft .NET Framework 2.0
- Microsoft SQL Server 2005 Express Edition or a greater
- Microsoft Visual C++ 2005 SP1 Redistributable Package

1.2 Network Configuration

The Panorama Network is composed of two separate networks, E-LAN (Patient LAN) and C-LAN (Central LAN). For Panorama Web Viewer to work properly, both networks must be plugged into the same switch and then connected to the server workstation via one of the network interface cards. The second card should be connected to the hospital intranet.

NOTE: For Panorama Web Viewer use, Panorama Central Station software must be version 8.4.X or 8.5.X and the E-LAN must be configured to either View Only or Full.

NOTE: The switch that connects the E-LAN and C-LAN must be either a level 2 "smart" switch or a level 3 switch. The level 2 switch must support the IGMP feature.

NOTE: If the E-LAN and C-LAN are already connected to individual 3com 2250 Plus switches, then a patch cable can be used to connect these two switches.

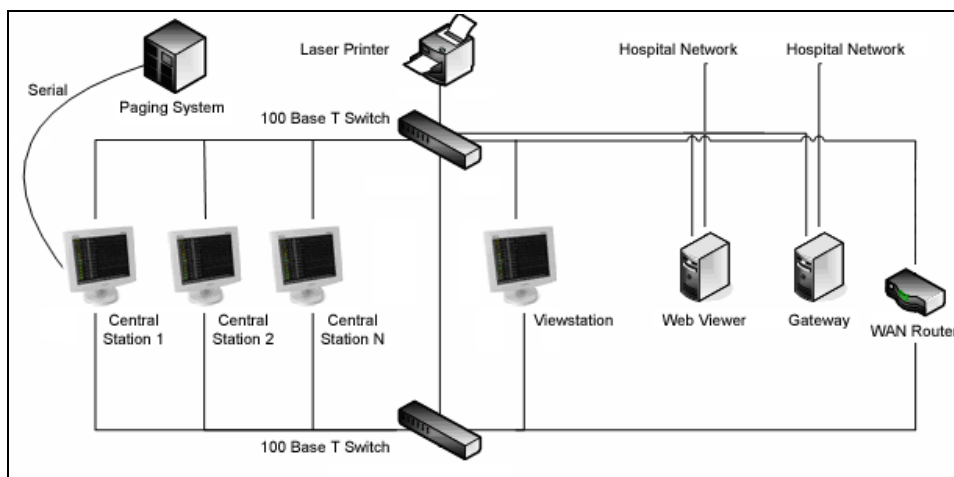


FIGURE 1-1 Panorama Web Viewer Network

1.3 Server Configuration

All server-side software must be previously installed in order for the web viewer installation to be successful. Only one Panorama Web Viewer should be installed per Panorama Network. One of the network cards must be set up to be exclusively dedicated to the Panorama Network. The IP must be statically set to 7.6.6.235, the subnet mask must be set to 255.0.0.0, and configured for 100 Mbps speed Half-Duplex mode. Bindings for this network card must be setup. Select "Client for Microsoft Networks" and choose "Internet Protocol (TCP/IP)" from the submenu and, if present, "NWLink IPX/SPX/NetBIOS Compatible Transport Protocol". All other items must be unselected.

The other network card should be setup for the hospital intranet according to the hospital's configurations.

WARNING: There is a potential danger to the patient if an improperly configured Server is connected to the Panorama Network. This may interrupt the normal functions of the Central Stations and Patient Monitoring devices on the Panorama Network.

If a browser window is closed without first logging off the Panorama Web Viewer, the corresponding user license will not be available until that session expires. To minimize the wait in this situation, the session timeout can be decreased to between five and ten minutes in the settings for IIS.

NOTE: Changing the session time while users are logged in, will cause the users to have to login in again.

ASP.NET scripts should also be allowed to run. These can also be changed in the IIS settings.

Panorama Web Viewer must be installed on the same server as the MS SQL database instance. SQL Authentication Mode must be set to "Mixed Mode (Windows Authentication and SQL Server Authentication)".

1.4 Client Side Requirements

1.4.1 Recommended Software

- Microsoft Windows 98SE, 2000, NT, XP or Vista
- Microsoft Internet Explorer (IE) 6 SP1, 6 SP2, 7.0
- Microsoft .NET Framework 2.0
- 1024 x 768 display

1.5 Client Configuration

There is no client software needed to use Panorama Web Viewer aside from Internet Explorer. Since the Panorama Web Viewer uses Windows user controls that are written with .NET Framework 2.0, real-time waveforms and graphic trending can be displayed. Both Microsoft IE and .NET 2.0 must be previously installed for the Panorama Web Viewer to function properly. Additionally, Microsoft IE should have cookies, active scripting components and plug-ins, and .NET components enabled. We also recommend adding the Web Viewer web page to the "Trusted Sites" list.

This page intentionally left blank.

2.1 Installing the Panorama Web Viewer

1. Insert the Panorama Web Viewer software into the CD-ROM drive.
2. The InstallShield Wizard should automatically start. If it does not, run Setup.exe from the home directory of the CD.
3. After the welcome screen is displayed, select the **Next** button.

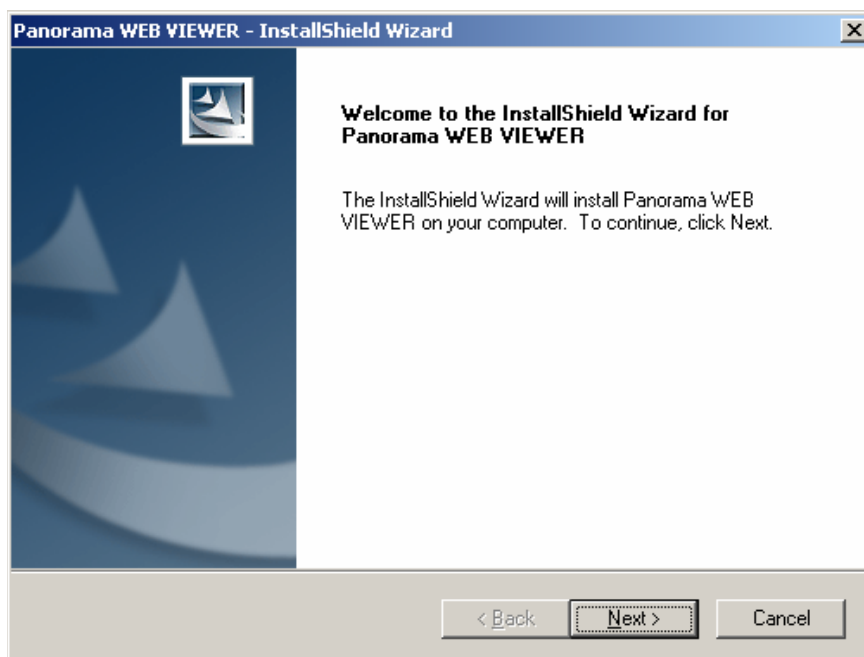


FIGURE 2-1 InstallShield Wizard

4. Read and accept the license agreement to continue. If the license agreement is not accepted, setup will close.

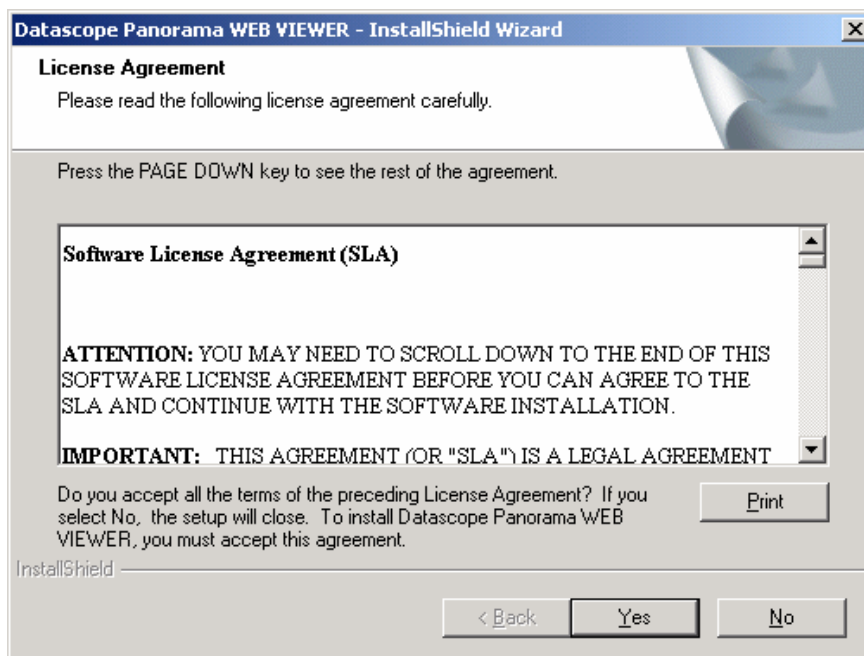


FIGURE 2-2 License Agreement

5. Select the Destination Folder to which the Panorama Web Service should be installed. Select the **Next** button to proceed.

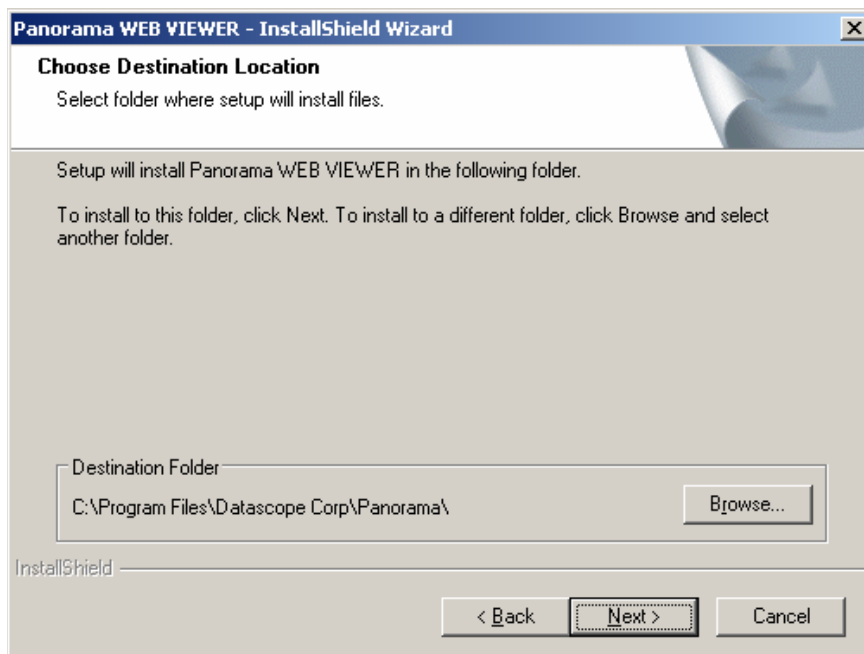


FIGURE 2-3 Destination Folder

6. All features must be selected for the installation to be successful. If this is an upgrade or reinstallation of the Panorama Web Viewer, the Create Database option should not be selected as the necessary database already exists. Select the **Next** button to proceed.

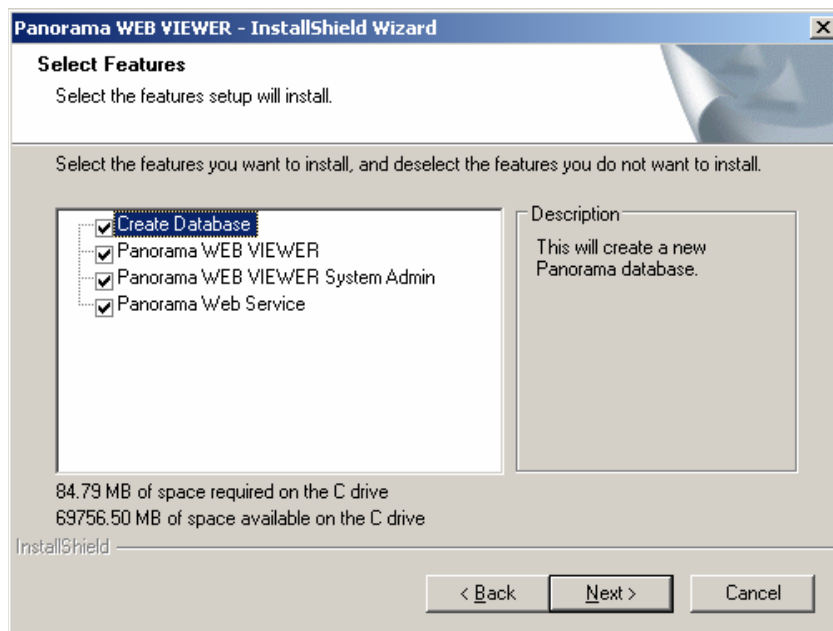


FIGURE 2-4 Feature Installation

7. Select a TCP Port Number, a Web Service Logs Directory (to maintain error logs), and the Patient Network Card (network interface card) that will connect to the Panorama Network. Select the **Next** button to proceed.

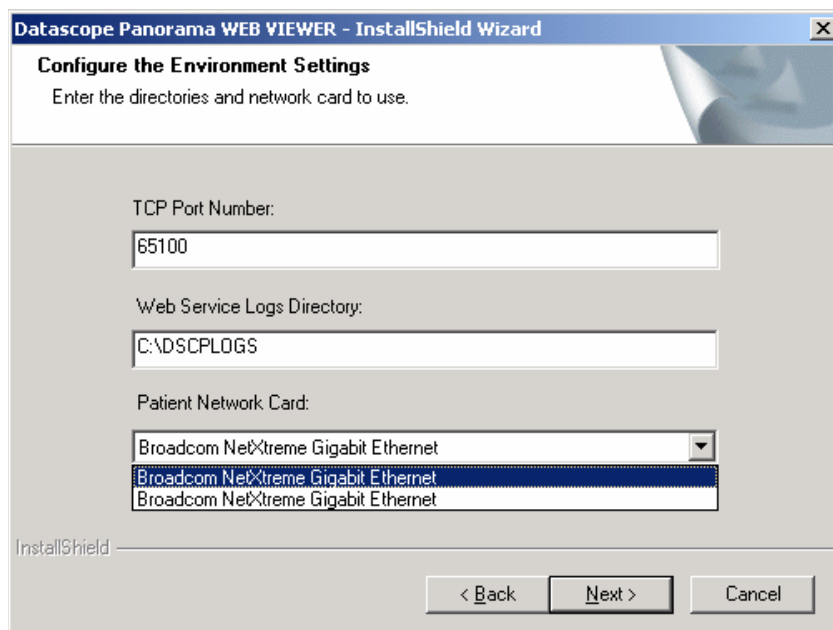


FIGURE 2-5 Environment Settings

8. Select the Database Server instance and authentication method to be used with Panorama Web Viewer. Select the **Next** button to proceed.

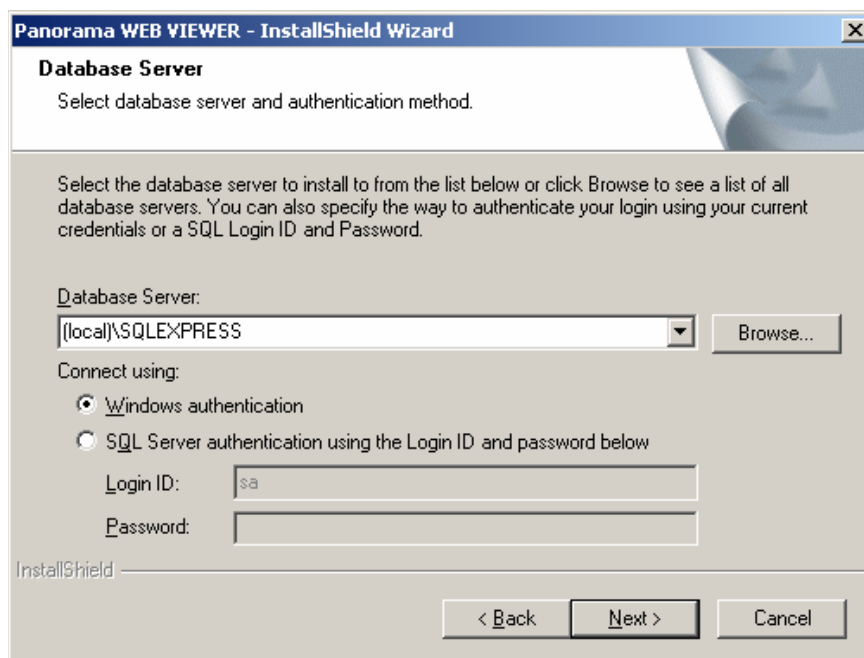


FIGURE 2-6 Database Server

9. Select the **Install** button to start installation of the Panorama Web Viewer. During installation, several DOS windows will be displayed. Do not close any of these windows.

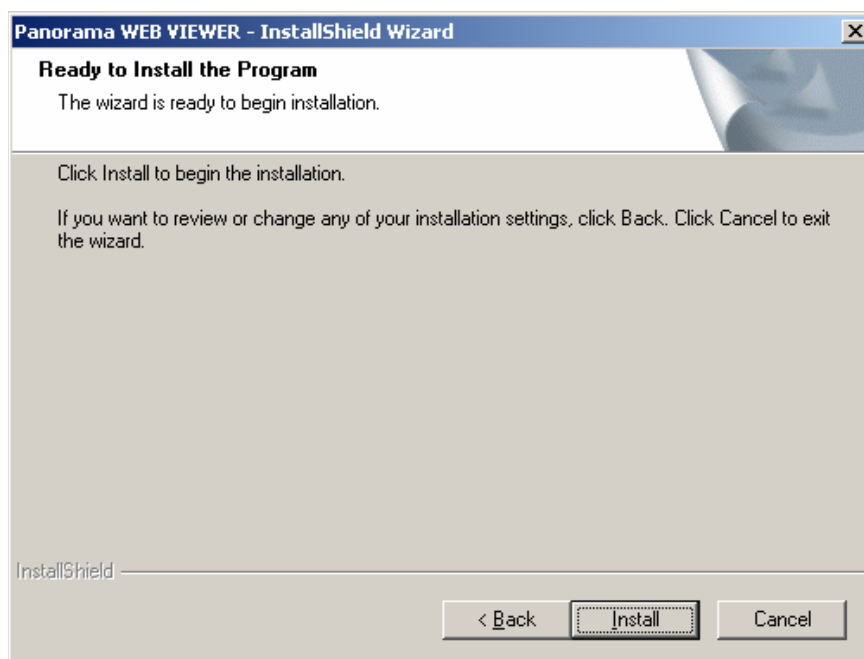


FIGURE 2-7 Begin Installation

10. Choose "Yes, I want to restart my computer now." and select the **Finish** button to complete the installation.

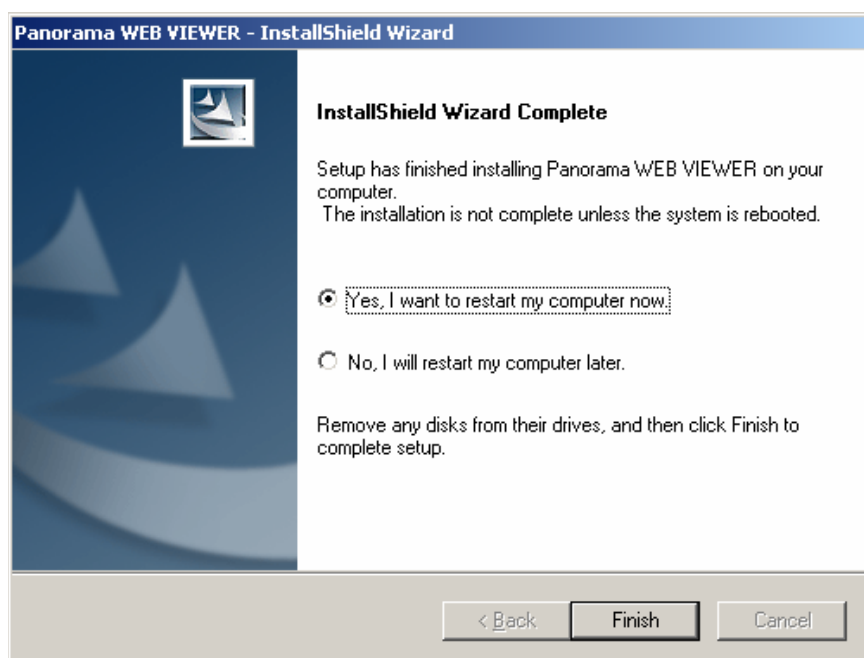


FIGURE 2-8 Installation Complete

This page intentionally left blank.

3.1 Uninstalling the Panorama Web Viewer

1. To uninstall the Panorama Web Viewer, access the Windows Control Panel and select **Add or Remove Programs**.

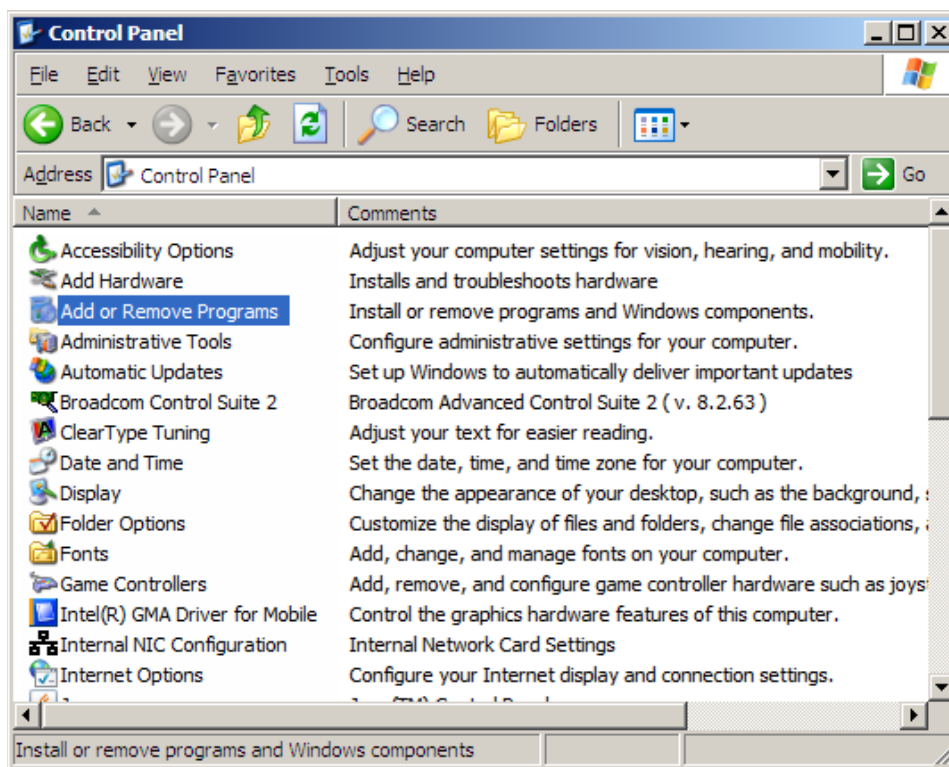


FIGURE 3-1 Windows Control Panel

- From the list of programs, highlight Panorama WEB VIEWER and then select the **Change/Remove** button. After the InstallShield Wizard opens, highlight the **Remove** option and then select the **Next** button to proceed.

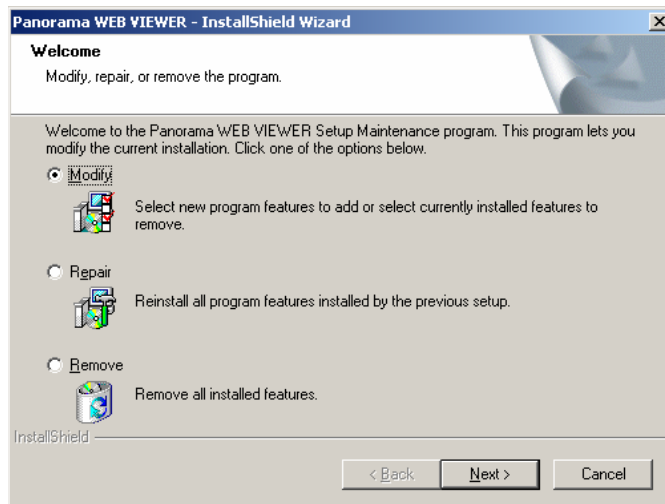


FIGURE 3-2 Uninstallation

- Select the **Yes** button to completely remove the Panorama Web Viewer application and all of its features.

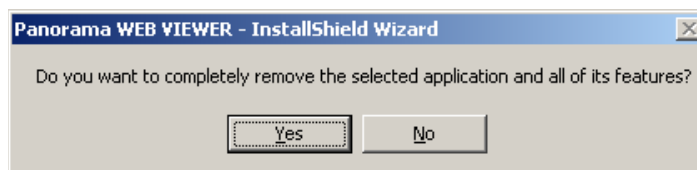


FIGURE 3-3 Verify Uninstallation

- Select the **Finish** button to close the InstallShield Wizard, and complete the uninstall process.

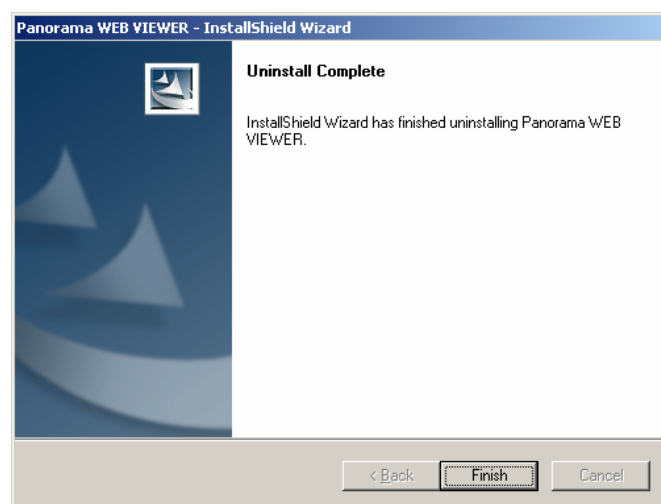


FIGURE 3-4 Uninstallation Complete

The uninstallation process does not remove all Panorama Web Viewer references from the system.

The following entries remain in the registry:

- `hkey_current_user\software\microsoft\search assistant\acmru\5603`
name: 000, type: reg_sz, data: dbserver.exe
- `hkey_user\s-1-5-21-2793206841-480823296-2706022058-1003\software\microsoft\search assistant\acmru\5603`
name: 000, type: reg_sz, data: dbserver.exe

The following directories remain on the system:

- "C:\Documents and Settings\ecs_user"
- "C:\Documents and Settings\All Users\Application Data\Datascope"

The registry entries, directories, and the "Web Viewer" database can be manually deleted if desired.

This page intentionally left blank.

4.1 Administrative Login

NOTE: The Panorama Web Viewer software must be installed before user accounts can be setup.

Open Internet Explorer on any PC that is connected to the hospital intranet and go to the following URL: "http://<Server Name/IP of Server>/PanoramaWebViewerSysAdmin".

The Administrative Login dialog box will be displayed as shown in FIGURE 4-1. The default User Name and Password is "admin" for both. After entering the User Name and Password, select the **Enter** button to login to the Home Page shown in FIGURE 4-2.

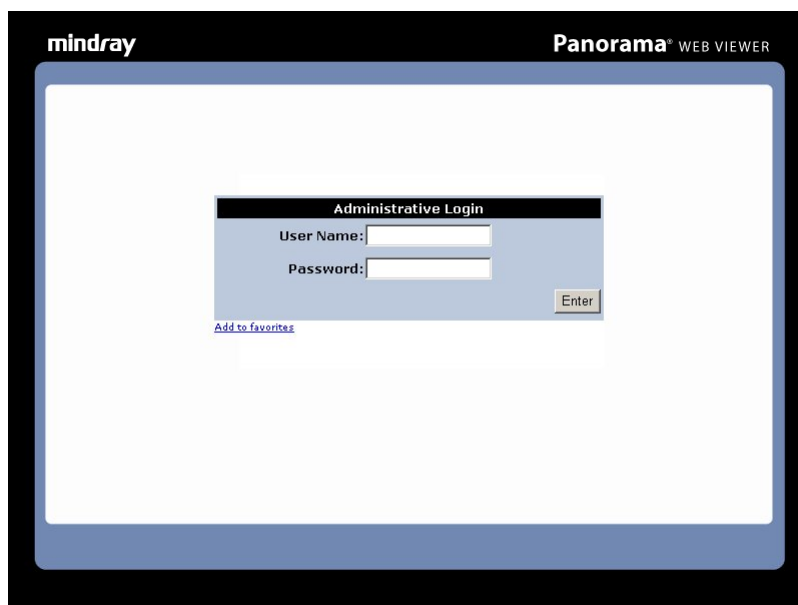


FIGURE 4-1 Administrative Login

Select the **User Management** option to open the page where user accounts can be created, deleted or modified. Select the **System Configuration** option to open the page where user defaults can be set.

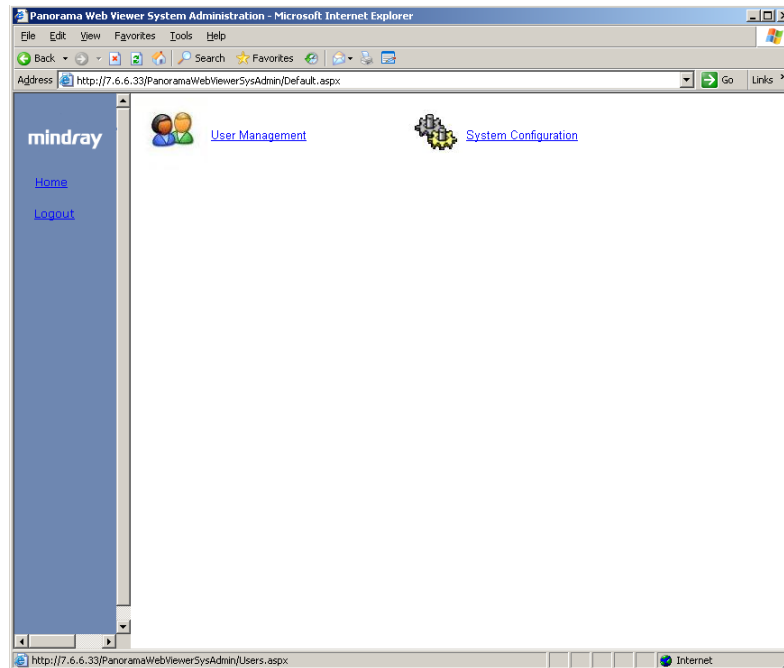


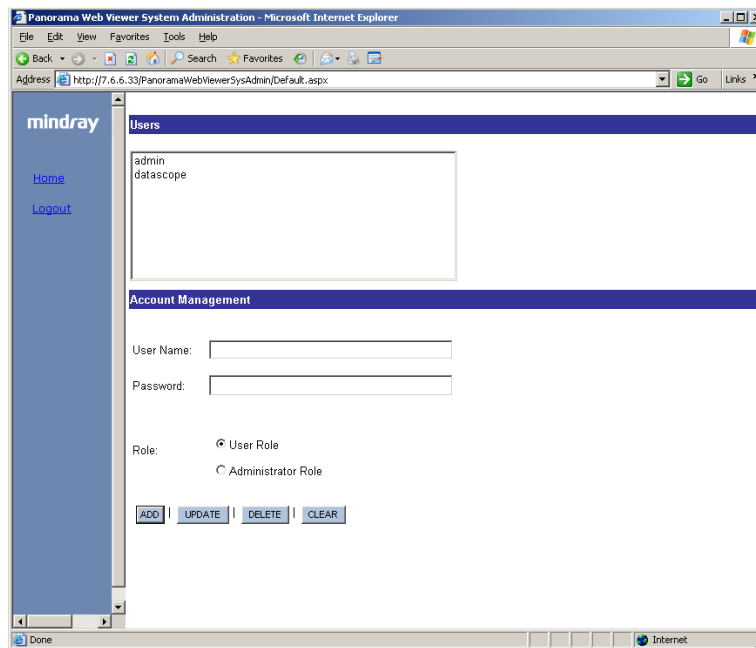
FIGURE 4-2 The Home Page

4.1.1 User Management

Create a new user account by entering the **User Name** and **Password** and then selecting the **Role**. The choices for Role are either **User Role** or **Administrator Role**. Select the **ADD** button to add the new user to the "Users" list.

Delete a user account by selecting a user name from the "Users" list and then select the **DELETE** button. A dialog box will be displayed to confirm the deletion.

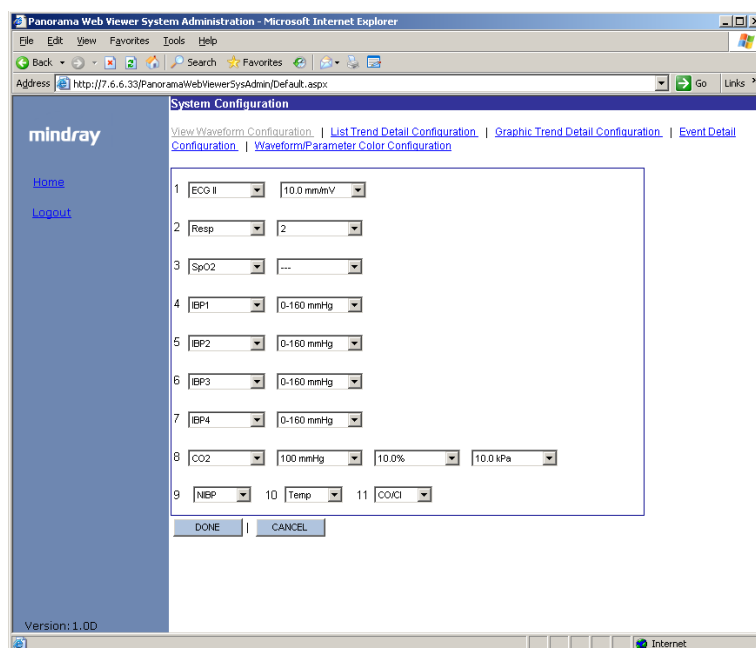
Modify a user account by selecting a user name from the "Users" list. Then change either **User Name**, **Password**, or **Role**. After modifying, select the **UPDATE** button to save the new settings will be saved.

**FIGURE 4-3** User Management

4.1.2

System Configuration

This page allows the user to set defaults for: Waveform Configurations, Trend Detail Configurations, Graphic Trends Detail Configurations, Event Detail Configurations, and Waveform/Parameter Color Configurations. Please refer to the Operations Manual (P/N 0070-CD-0681-01) for more in depth instructions in using the Panorama Web Viewer.

**FIGURE 4-4** System Configuration

4.2 User Login

NOTE: User accounts must be created by an administrator before users can log in.

Open Internet Explorer on any PC that is connected to the hospital intranet and go to the following URL: "http://< Server Name/IP of Server >/PanoramaWebViewer".

The user login in dialog box will be displayed as shown in FIGURE 4-5. Enter the user **Name** and **Password** supplied by the administrator, and then select the **Enter** button to complete the login.

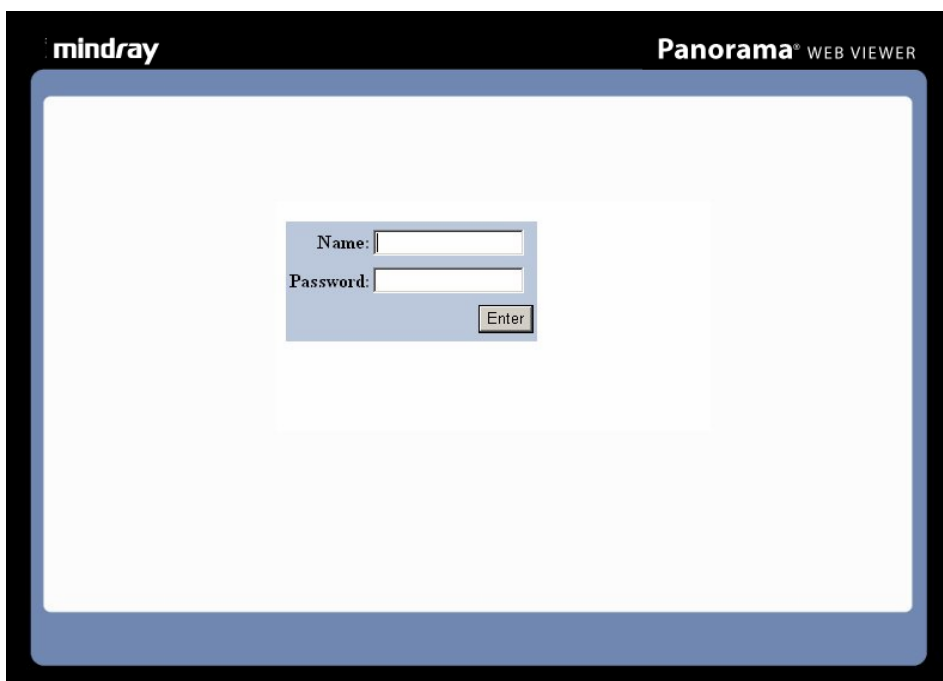
The image shows a web browser window with a black header bar. On the left of the header is the 'mindray' logo, and on the right is the text 'Panorama® WEB VIEWER'. The main content area has a light blue border and a white background. In the center, there is a login form with a light blue background. The form contains two text input fields: the top one is labeled 'Name:' and the bottom one is labeled 'Password:'. To the right of the 'Password:' field is a small button labeled 'Enter'.

FIGURE 4-5 User Login Dialog Box

4.2.1 Display Calibration

When logging in for the first time, the display must be calibrated since screen resolutions vary between computers. The PREFERENCES tab will be displayed as shown in FIGURE 4-6.

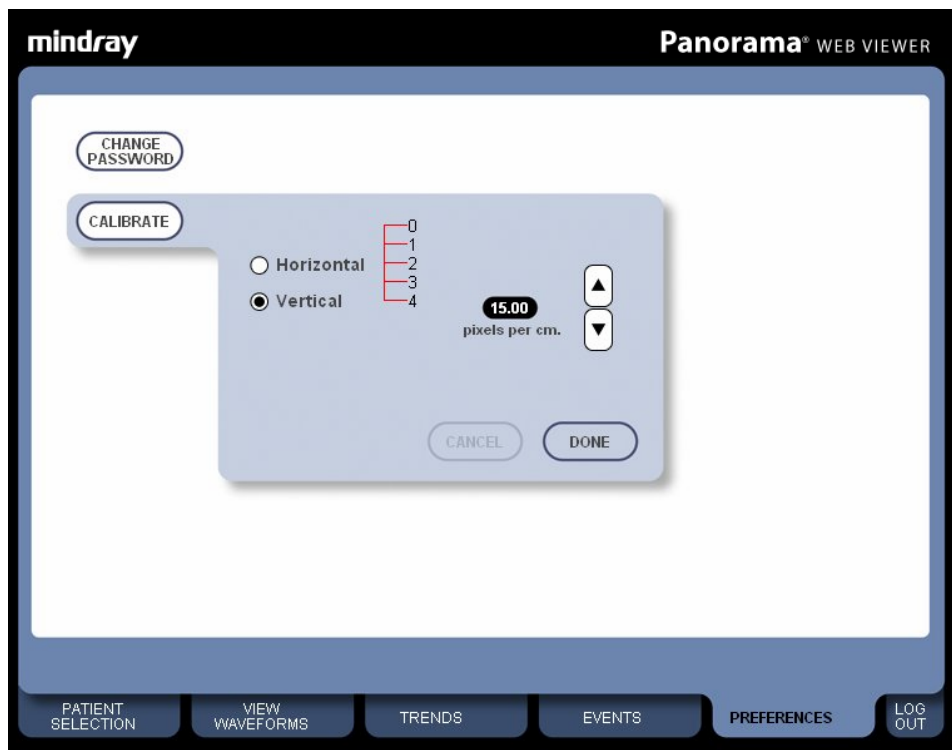


FIGURE 4-6 Display Calibration

A metric ruler with cm graduations is required for this calibration.

1. Align the 0 mark on the ruler with the scale on the screen.
2. Select the up and down arrows as necessary to align the four centimeter mark on the screen to the four centimeter mark on the ruler. See the example in FIGURE 4-7.
3. After calibrating the screen vertically, select the **DONE** button and perform the same procedure for horizontal calibration.

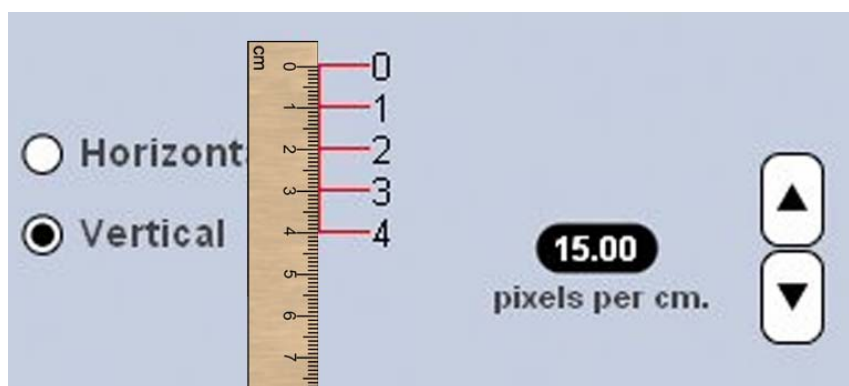


FIGURE 4-7 Calibrating the Display

4.2.2 Menu Selections

To view patient data, the **PATIENT SELECTION** tab (shown in FIGURE 4-8) must first be used to select the appropriate Panorama Central Station and the desired patient.

NOTE: **Display calibration is required before patient selection can occur. For additional information, refer to ?Display Calibration? on page 4-5.**

NOTE: **Only one patient may be selected at a time.**

After selecting the appropriate central station, a list of patients on that station will be displayed on the same page. A radio button is used to select the desired patient. Waveforms, trend data and events can then be viewed for the selected patient through the associated tabs.

NOTE: **Refer to the Operation Instructions Manual (P/N 0070-10-0681-01) for more in depth directions for using the Panorama Web Viewer.**

Select	Bed	LAST NAME	FIRST NAME	ID
<input type="radio"/>	1	Smith	John	345332
<input type="radio"/>	2	Long	Sara	675448
<input type="radio"/>	3	Jones	Pete	857897


Panorama 1 REFRESH

PATIENT SELECTION **VIEW WAVEFORMS** **TRENDS** **EVENTS** **PREFERENCES** **LOG OUT**

FIGURE 4-8 PATIENT SELECTION Tab

4.3 Exiting the Panorama Web Viewer Application

- Click the **LOG OUT** tab to close the Panorama Web Viewer application and return to the Authentication Page.

NOTE: Do not select Close from the browser File menu or use the Internet Explorer Close button  to exit the Web Viewer application. If the session is not properly closed by logging out, the user session license may not be released, which may reduce the number of permissible concurrent users. If this happens, the System Administrator will need to release the license(s) by restarting the server. [MR17959]

This page intentionally left blank.

If service is required, contact a Service Representative.

MESSAGE/ISSUE	REASON/SOLUTION
No Licenses Available	The number of users viewing patients has reached the maximum number of licenses available. At least one of the users must log off for a license to become available.
The error message No Licenses Available is being displayed even though the number of users is less than the number of licenses available.	If a user closes out of the Panorama Web Viewer without "Logging Out", the license will not become available until the session expires in IIS. Refer to section 1.3, Server Configuration.
The session timeout was changed but the sessions are still expiring at the same interval as before.	Ensure that the server has been restarted after the session time is changed to accept the new interval.
Calibration must be performed each time a user logs in.	In order for the settings to be saved at the PC, "Cookies" must be enabled and must not be manually deleted.
Waveforms cannot be viewed with Internet Explorer.	The .NET Framework must be installed on the PC. Ensure that the Internet Explorer security settings on the PC have ActiveX scripts and .NET Framework enabled.
Panorama Web Viewer login through Internet Explorer does not function.	Using the server IP address, verify whether the hospital network/server is online by using the ping command at the DOS command prompt. If the ping is successful, then it is possible that the Panorama Web Viewer application is not running on the server. The Panorama Web Viewer application can be restarted by starting/restarting the Panorama Web Viewer Service on the server.
The Panorama Web Service pegs the CPU.	Verify that the Web Service Logs Directory exists. If it does not, the folder must be manually created. To determine the proper label for the folder, access the Systems menu in the Windows Control Panel , then select the Advanced tab and then select the Environment Variables button. The path and name of the logs folder should be the value of the ECSLOGGERDIR variable.

MESSAGE/ISSUE	REASON/SOLUTION
All users are unable to log in to the Panorama Web Viewer and/or Panorama Web Viewer System Admin pages.	Verify that the SQL Server service is running, also verify that the Web Viewer and Web Viewer Sys Admin databases exist. Then, verify the connection string for the database in IIS. Access the Administrative Tools menu in the Windows Control Panel , and select the Edit Configuration button. The database connection string should include the Computer name and Database name ("...Data Source=COMPUTER\Database..."), and Username and Password for the database (this will NOT be the same login information as for the Panorama Web Viewer Login). Perform the same steps for the Web Viewer System Administration website. Ensure that the user name exists and the correct password is being used when logging in.
The network card for the Panorama Network must be changed.	To change the network card used for ELAN communications, the value of the PWEBELANCARD environment variable must be changed. To do this, access the Systems menu in the Windows Control Panel then select the Advanced tab and then select the Environment Variables button. Choose PWEBELANCARD from the "System variables" list then select the Edit button the, and change the information in the Variable value field.
The Panorama Web Service does not startup.	Verify that both the Panorama and hospital network interface cards are configured and plugged in properly. Also verify that the Panorama Web Viewer environment variables exist. To do this, access the Systems menu in the Windows Control Panel then select the Advanced tab and then select the Environment Variables button. Verify that ECSDBDIR, ECSDBSHARE, ECSLOGGERDIR, PWEBELANCARD are present in the "System variables" list. Also, verify that the Web Service Logs Directory exists. If it does not, the folder must be manually created. To determine the proper label for the folder, access the Systems menu in the Windows Control Panel , then select the Advanced tab and then select the Environment Variables button. The path and name of the logs folder should be the value of the ECSLOGGERDIR variable.
The Panorama Web Service does not start automatically on Windows reboot.	Access the Administrative Tools menu in the Windows Control Panel , and expand the menu beside "Local Policies", select User Rights Assignment , and then verify that the ecs_user account is added to the "Log on as a service" local security policy.
Some or all known central stations are not available for selection.	Select the Refresh button. Verify that the Panorama Network cable is plugged in and that the computer communicates on this network by pinging one of the Central Stations. Since there are two network cards, also ensure that the network cables are connected to their corresponding network cards.
Real-time patient data is viewable but historical data is not.	Verify that DBserver.exe and dbserverps.dll are registered on the server. If they are not, access the DOS command prompt and execute the following command: C:\path_of_panorama_web_viewer_directory\dbserver.exe / RegServer regsvr32 "C:\path_of_panorama_web_viewer_directory\dbserverps.dll"

This page intentionally left blank.

*Mindray DS USA, Inc. • 800 MacArthur Boulevard • Mahwah, NJ 07430 • USA •
Dom. Customer Service: 1.800.288.2121 • Intl. Customer Service: +1.201.995.8000 •
Dom. Fax: 1.800.926.4275 • Intl. Fax: +1.201.995.8680 • www.mindray.com*

*Mindray Medical Netherlands B.V. • P.O. Box 26 • 3870 CA Hoevelaken • The Netherlands •
Tel: +31 33 25 44 911 • Fax: +31 33 25 37 621*

*Mindray (UK) Limited • 3 Percy Road • St. John's Park • Huntingdon • Cambridgeshire PE29 6SZ •
United Kingdom • Tel: 01480 416840 • Fax: 01480 436588*

*Mindray Medical France SARL • Europarc Créteil • 123, Chemin des Bassins •
94035 Créteil Cedex • France • Tel: (0)1.45.13.91.50 • Fax: (0)1.45.13.91.51*

*Mindray Medical German GmbH • Zwischen den Bächen 4 • 64625 Bensheim • Germany •
Tel: +49.6251.17524-0 • Fax: +49.6251.17524-20*

*Mindray Medical International Ltd. • 2813 Office Tower, Convention Plaza • No 1 Harbour Road •
Wanchai • Hong Kong • Tel: +852 2793 5596 • Fax: +852 2344 8824*